

Energy efficient, environmentally friendly, and easier to use

MATSUDA
 http://www.mtd.co.jp/
VI-200V(S3)-40/70SPR2
 VERTICAL RUBBER VACUUM INJECTION MOLDING MACHINE

VS3 THE TOP QUALITY MOLDING MACHINE FULL MODEL CHANGE

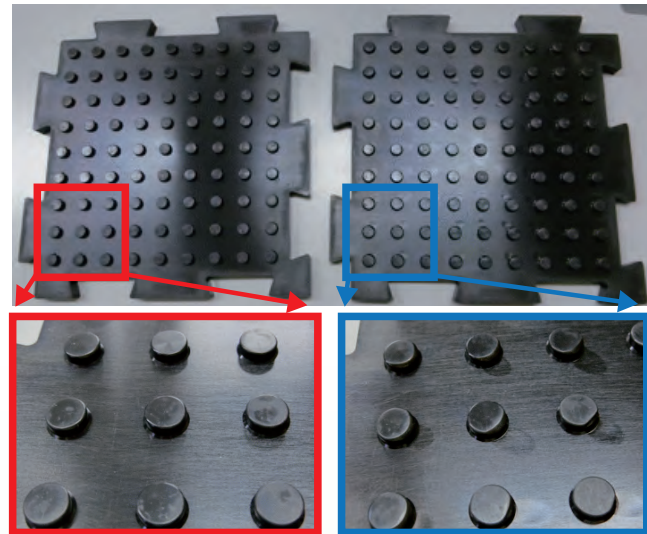
VS3 series

Easier to use, thanks to further improvements in six key features.

Feature 1 Reduction of fraction defective

Vacuums the area around the mold significantly reduces molding defects caused by air. ※ Allows vacuum molding with molds not specifically engineered for vacuum molding.

Effect of vacuuming



Vacuums used Vacuuming not used

Without vacuuming, the shape of the protruding sections is distorted. Indentations appear around protruding sections due to fluidity failure. With vacuuming used, the shape is perfect, and indentations are absent.

Feature 2 Low workbench height

The workbench height is 101 mm lower than with our previous model, eliminating the need to set up another workbench and thereby improving work safety.

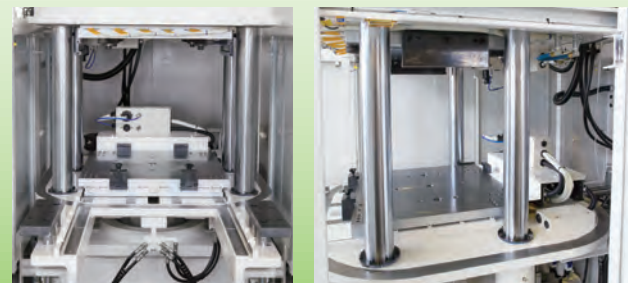
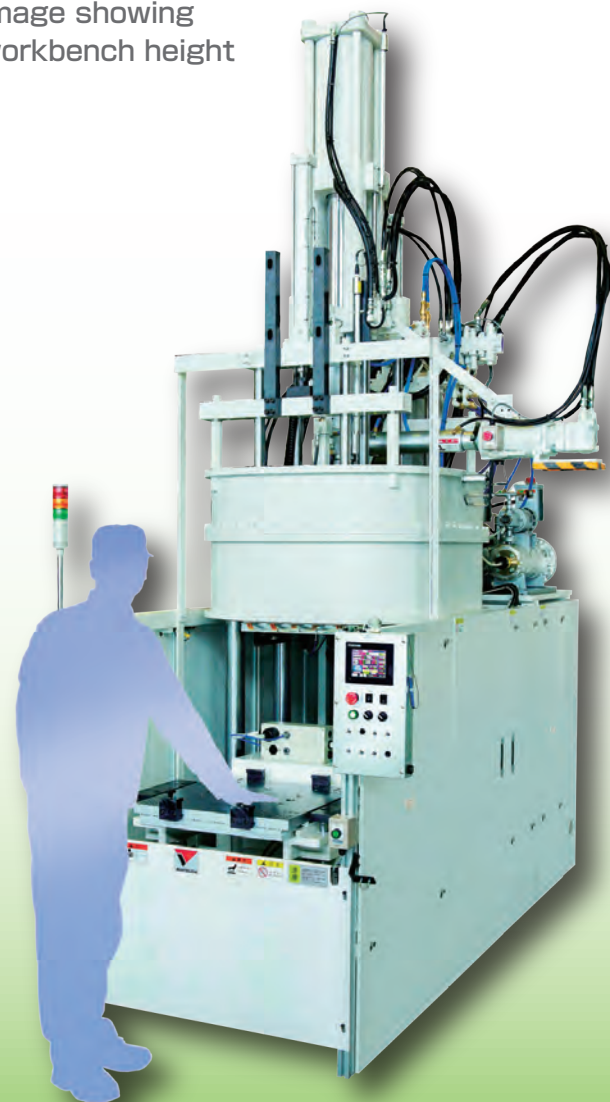
Workbench height
 Previous V(S2) model : 998mm ▶ V(S3) : 897mm

Feature 3 Saves space

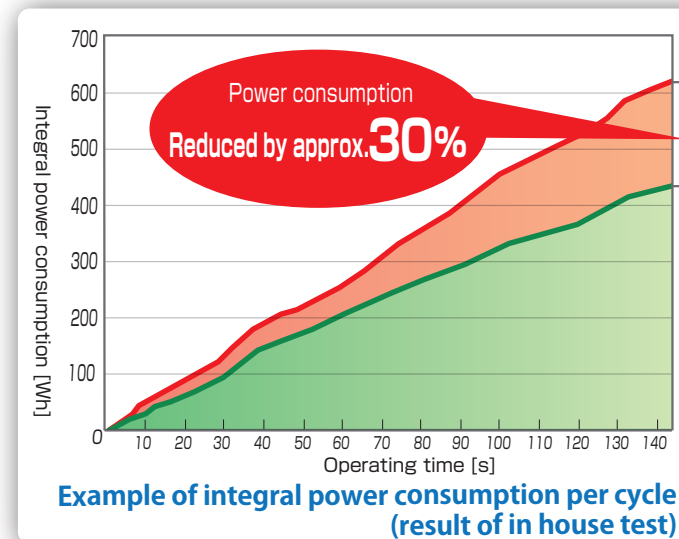
The reduced dimensions maximize productivity from limited factory floorspace.

Overall height
 Previous V(S2) model : 4,488 mm ▶ V(S3) : 4,217 mm
 Overall width
 Previous V(S2) model : 1,350 mm ▶ V(S3) : 1,300 mm

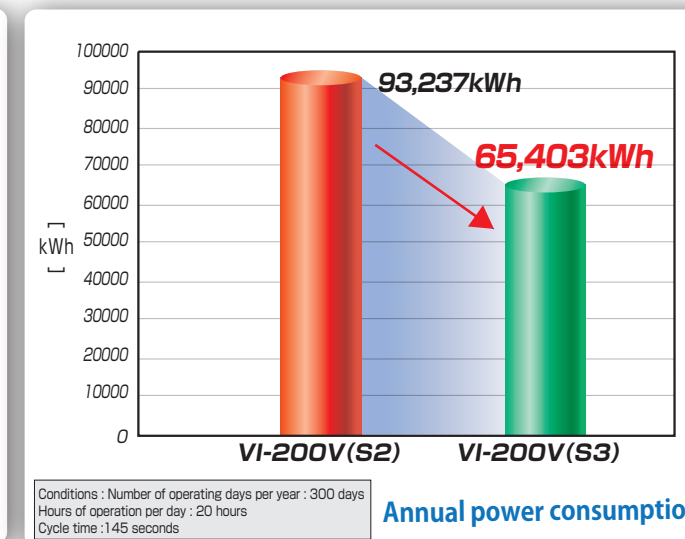
Image showing workbench height



Feature 4 Energy efficient



The rotation control pump featuring an IPM motor and the high effectiveness insulation plate significantly reduce power consumption. While actual power savings will vary with molding conditions, power consumption is typically 30% lower than with our previous V(S2) model.



Feature 5 Reduced molding cycle times

The reduced space inside the vacuum frame decreases the time required to achieve a vacuum, thereby shortening molding cycle times.

Time required to achieve vacuum — 6.7seconds faster

Previous model
 VI-200V(S2) 15.5seconds ▶ VI-200V(S3) 8.8seconds

In house test mold Mold thickness: 240 mm
 Vacuum level -88 kPaG
 Vacuum pump motor power supply frequency 60 Hz
 The time required to achieve the specified vacuum depends on the size of the mold used.

Feature 6 Improved maintenance efficiency

Raising the vacuum frame opens up the machine, just like a vertical type injection molding machine, dramatically improving maintenance efficiency for wiring/piping work around the mold. The design also minimizes accumulations of rubber burrs that can cause machine problems and makes the machine easy to clean.

Equipment

Standard accessory units

Rotation control pump	Cycle counter
High effectiveness insulation plate	Cycle checker
Vacuum unit	Nozzle back timing selection switch
Touch panel (5.7 model)	Emergency stop button
Full operation switch	Degassing in the middle of injection
Operation data storage (data of 60 molds)	
Maintenance information management screen	
Vacuum frame fall prevention unit	
Heating plate	
Mold slide unit (with a selector switch)	
Hydraulic ejector unit after mold sliding (with an outer package and selector switch furnished)	
Wire broken detector for heating plate (current sensing type)	
Out of material detection and alarm (roller type)	
Status alarm storage (capable of displaying up to 2,000 alarm records)	
Clamping force regulator	
Mold opening/closing speed regulator	
Speed reducer for mold mounting (with a selector switch)	
Low pressure (adjustable) clamping for mold protection	
Low pressure clamping and injection compression (with selector switch)	
Pressure relief degassing (1~9 times)	
Photoelectric switches as safety	
Overstroke prevention unit	
Power saving clamp (valve degaussing after pressure increase)	
Hot oil circulator for injection temperature control (MN-20)	
Injection speed change over 3 levels	
Injection pressure change over 3 levels	
Injection pressure damping rate	
Screw rotation control	
Digital charge settings	
Back pressure control	

Optional units

Vacuum pump with inverter control
Heat-up timer
Mold simple attaching unit (lock-bar method)
Hot oil circulator for cold runner
Delay timer for cold runner
Alarm light
Material hoisting unit
Middle mold slide unit
Material stuffing unit